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PATENT APPLICATION  
Mo-6689  
LeA 34,859

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICATION OF	)	
ANDREAS SEIDEL ET AL	)	GROUP NO.: 1714
SERIAL NUMBER: 10/054,276	)	
FILED: JANUARY 22, 2002	)	EXAMINER: K. SANDERS
TITLE: POLYCARBONATE COMPOSITIONS	)	
WITH REDUCED IRON CONTENT	)	

**RESPONSE**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The Office Action dated December 8, 2004 issued in the subject patent application has been received and reviewed and the following is in response thereto.

The present invention is directed to a composition containing polycarbonate and an inorganic material in particulate form, the particle geometry being anisotropic.

Importantly, the total iron content of the composition is less than 100 ppm. Key to the invention is the finding that the impact performance of the composition depends on the iron content. Attention is directed to the results shown below that are extracted from Table 1 (page 35 of the application):

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Alexandria VA 22313-1450 3/03/05  
Date

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Name of applicant, assignee or Registered Representative

*AP*  
Signature  
March 3, 2005  
Date

Example	1	V1*	2	V2	3	V7
Particle size, microns	0.9	1.0	1.2	1.2	2.1	2.0
Iron content, %	0.14	1.3	0.06	0.98	0.07	1.79
Impact strength, kJ/m <sup>2</sup>	33	20	29	18	27	15
Iron content, ppm (calculated)	28	260	12	196	14	358

\* "V" denotes a comparison example

Except for the size and iron content of the included inorganic material, the compositions (containing 2 wt% inorganic material) were prepared following identical procedures and contained identical components in identical amounts.

Comparisons between Examples 1 and V1 (a comparative example) 2 and V2 and between 3 and V7 point to a critical dependence of impact strength on the iron content. These results do not show a correlation between impact strength and particle size.

Corresponding comparisons between Examples 6 and V9 and 7 and V10 point to the dependence of the brittle/ductile transition temperature of the claimed composition on its iron content.

Claims 1-12 and 16 stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent 5,162,419 to Pottier-Metz et al. (the '419 document)

The standard for anticipation is one of strict identity. To anticipate a claim for a patent, a single prior art document must contain all the essential elements of the claimed invention. In *Re Donohue* 226 USPQ 619.

Set against this standard, the '419 document that disclosed nothing relative to iron cannot reasonably be taken as anticipatory. Reconsideration and withdrawal of the rejection alleging anticipation is requested.

As discussed above, the dependence of impact properties of the claimed composition on the iron concentration is surprising and unexpected in view of the art of record and its demonstration is believed to address the stated rejection under Section 103.

Claims 13-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,162,419 to Pottier-Metz et al. (the '419 document) and further in view of U.S. Patent 5,961,915 to Toyouchi et al. (the '915 document).

The '419 document has been discussed above and its shortcoming in the present context were noted.

The '915 document disclosed a flame retardant composition containing an amorphous thermoplastic resin, an inorganic filler in a scale form and a phosphoric acid ester contains nothing relative to iron content and is thus seen to supplement the disclosure of the '419 in no presently relevant fashion.

The reconsideration and withdrawal of the rejection alleging obviousness is solicited.

Believing the above represent a complete response to the Office Action and that the application is in condition for allowance, Applicants request the earliest issuance of an indication to this effect.

Respectfully submitted,

By



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